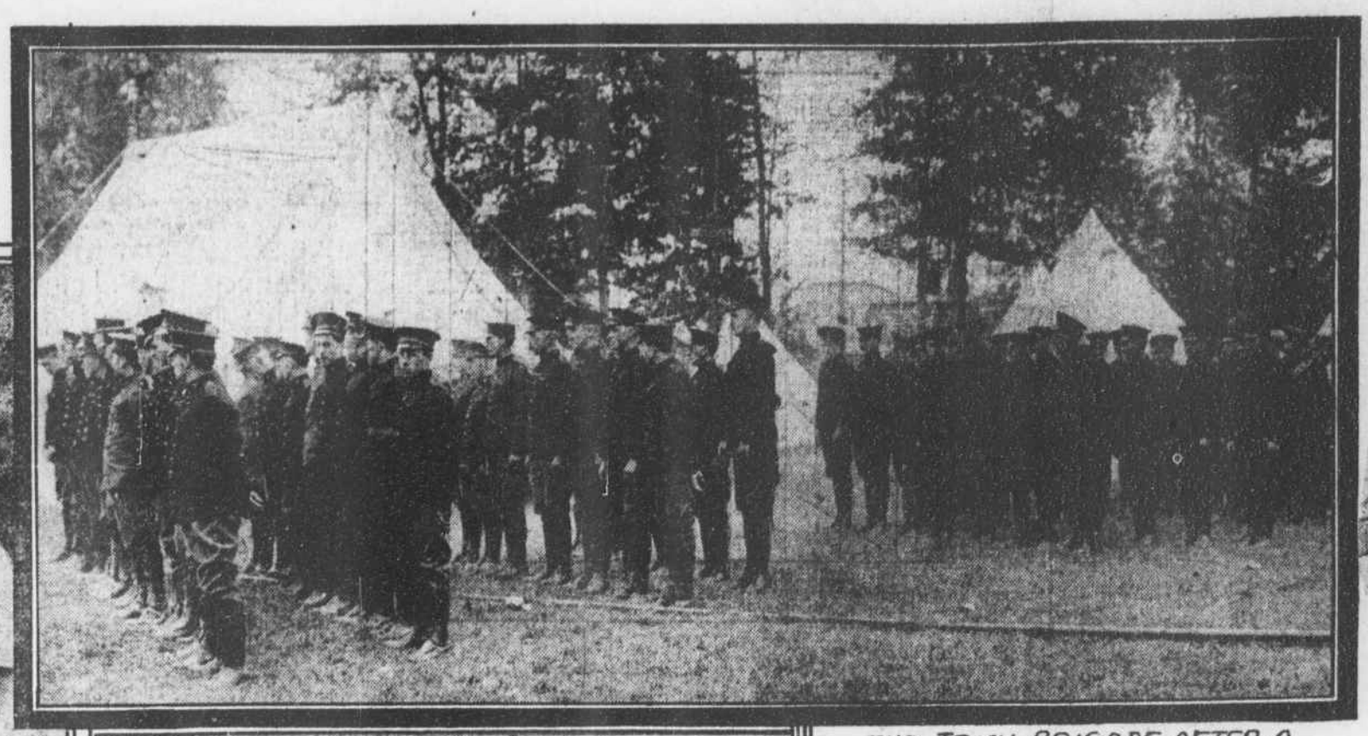
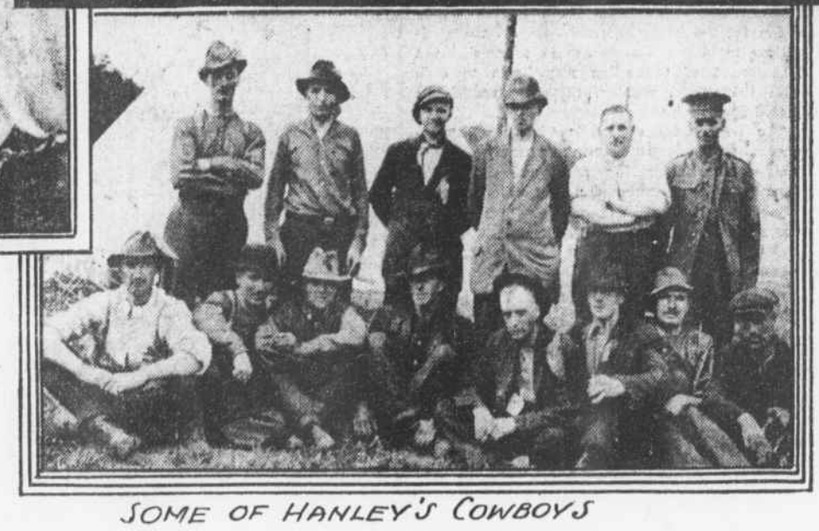
HERE GOES A BUNCH OF COWBOYS TO BATTLE FOR BRITAIN

Band of Rough-Riding Plainsmen Off for Service Against the Germans—The "Irish Brigade from Calgary."

GIRLS COOKING AT OTTAWA, CANADA.





SOME OF HANLEY'S COWBOYS

THE IRISH BRIGADE AFTER A WEEK'S DRILLING.

SERGEANT MAJOR GERALD HANLEY WHO ORGANIZED TROOP of COWBOYS AT CALGARY

GERMAN soldiers invading France will have an opportunity for the first time in history in a short time to pit themselves against some genuine, rough-riding cowboys. The patriotic spirit rampant in Canada since the call of King George for arms and men brought a band of the dare devil plainsmen together, and the chap-protected, red-kerchiefed members are now going over the Atlantic to fight in the ranks of the allies.

It was through the efforts of Sergeant Major Gerald Hanley, for many years the head of the mounted police stationed at Calgary, Alberta, that the cowboy company was formed.

Hanley is a veteran of the Boer war in South Africa. He was attached to the scouting corps of Lord Kitchener, now England's Minister of War, and was wounded three times. After the war closed he came to the United States and later joined the mounted police at Calgary. His first intimation of the present hostilities came in a letter from an English friend. Immediately upon reading the epistle he started quietly to work assembling a volunteer force.

Among the cowboys of the northwest province he had many friends, and they listened to his appeal attentively. Soon nearly two hundred of the "pdnchers" had "signed" with him, and when the call for volunteers came from London he "rounded them up." Out of his own pocket he paid their fares to Ottawa, where the mobilization camp was located. And there until they sailed the other day he drilled them, after fitting them out with uniforms. Their "cayuses" and arms had been freighted through, and Hanley led them aboard ship, all willing to fight to the last ditch for the cause of Great Britain.

All of the cowboys are capable fighters, and Hanley believes the world will hear great stories of their feats if they are thrown into action in France. Although they are crack shots with the carbines which have been slung over their saddle horns for many years, they prefer to fight with their revolvers. Almost every man in the company can clip a silver dollar at sixty paces with his .45. Most of the members of Hanley's band are Canadian citizens, but a few come from the cow camps of Montana. Several saw service under Theodore Roosevelt in the Spanish-American War.

Another remarkable company left Valcartier the other day under the leadership of Sergeant Dennis O'Connor, of Calgary. It was known as "the Irish Brigade from Calgary."

O'Connor was an ordinary citizen when he met Sergeant Hanley one day recruiting his force of cowboys. Immediately he had a "hunch" that a few fighting Irishmen from the Dominion might do England some good and he organized his troop. A trainload of the sons of Erin, each wearing an Irish flag on his coat lapel and a green handkerchief about his throat, followed O'Connor to Ottawa. They were the rawest of raw "rookies" when they landed, but before they departed they were trained into very creditable shape. O'Connor's company contains three clergymen, four physicians, six policemen, two dentists and two school teachers, with a number of sturdy laborers.

Great Britain may expect much from the Canadian subjects who have taken up arms in her defence. Loyalty is their watchword and their patriotism knows no bounds. At Ottawa before departure the spirit was evident in every movement. In their conversation the recruits told of their wish to assist and to fight to the end for the honor of the empire.

An incident showing the patriotism of the Canadians occurred several weeks ago, when three young women, all very good looking, presented themselves as volunteers.

"If you will not let us fight, please let us cook," they pleaded.

A commander listened, and in a very short time they were placed in charge of a commissary cook tent. They prepared many savory meals before the regiment left for Halifax and were much disappointed when they were told that they could not accompany the troops.

The Canadian army is not an autocratically governed institution, and for that reason it is expected the soldiers will fight better and more willingly when the time comes. Not until iron discipline is a matter of utmost necessity is it enforced by the officers.

At Ottawa on Friday a soldier wanted to say goodby to his mother two minutes before time for his train to pull out.

"You cannot go," an officer told him, and the soldier stared out of the window wistfully.

Another soldier approached the officer.

"Why don't you let the man go?" he said. "There is plenty of time for him to kiss his mother and still catch the train."

In the German army such a speech would have meant court martial. Not so in the Canadian.

"I guess you're right," came from the officer, and the soldier ran from the train, kissed his mother and returned happy.

SAYS SHORTAGE OF AMMUNITION WILL ULTIMATELY END THE WAR

By ALEXANDER KONTA.

"WHEN will the European war end?" is the burning question of the day. Prophets there are many to answer it; military experts, economists, statisticians have made what must be, after all, only guesses, however logical their arguments. These guesses run from six months to three years. Suppose we estimate at one year and a half.

The factors taken into consideration by the rash prophets who have undertaken to set a term for the greatest war in the history of the world have thus far been three: Food, money and men. Of the three, the question of numbers may be taken up here first. France and England frankly admit that they rely upon the inexhaustible supplies of cannon food over which the Czar rules. He has them in such quantities, and can order them to the slaughter with such Oriental disregard of human life (other humans' lives) that the factor of superior quality of the German armies will be entirely swamped. This is, in fact, Lord Kitchener's reliance. He has said he was ready for a war of two or three years. Meanwhile Germany is puzzling the military observers by the unexpected numbers of trained soldiers she seems to have at her disposal. She has, indeed, kept her military secrets well. As for Austria-Hungary, I can say with knowledge of the facts that her military resources have not yet begun to show their full strength.

If this war shall prove a short one, it will not be on account of the overwhelmnig numbers of Russia, in which Lord Kitchener puts his faith, nor will it be because of the starvation of the Germans and Austro-Hungarians, or because of their lack of money. There is a fourth factor in this war which has thus far been disregarded, but which I believe to be the decisive one. A few words on supplies and finance first, however.

FOOD SUPPLIES AND FINANCIAL RESOURCES IN THIS WAR.

In addition to transporting the millions and hordes Asiatics to the western battlefields, Great Britain will employ her fleet, not in battle if she can avoid it, but in starving Germany and, so far as possible, Austria-Hungary into submission. Probably she will find this not nearly so easy or as expeditious a task as the world seems to expect. The two empires struggling for existence are provisioned for a year—that is certain.

As for the financial question, that is in so chaotic a condition as yet that it is a matter for consideration after the war rather than during its progress. Here I believe I may speak with a little authority. The financing of wars has always been chaotic; such a science as war finance, with its strategy and major and minor tactics, has not yet been evolved by the world's financiers. I would, however, call the attention of theoretical political economists to the curious fact that during the first four weeks of this war the gold reserve of the Deutsche Bank has actually been increased by some 20,000,000 marks. And I would like to point out, further, that the present war expenses of both Germany and Austria-Hungary are spent at home. In other words, the money remains in the country.

In considering the reasons for an early termination of this war, then, neither food nor finance can be taken as a decisive factor. The Boers kept on fighting for a year without money, without credit, and on scant rations. What led to their ultimate surrender was the lack of ammunition. And now I have reached the real subject of this paper.

That Europe's consumption of ammunition during the present war is already far greater than its facilities to manufacture it needs hardly any proof. The allies, with all their state and private ammunition factories, plus whatever they can purchase in this country, are rapidly diminishing their stocks in hand and only replacing a small part of what they expend. Nor can their reserve stocks be very large, owing to the frequent improvements of firearms and explosives during the last twenty-five years, nearly every improvement having involved, as a matter of course, the invalidation of the old ammunition in hand. What is true of the allies applies equally to the German and Austro-Hungarian military establishments.

It may be worth mentioning here that one of the main incentives for the taking of Liege by the Germans was the existence in that city of one of the largest ammunition factories in Europe. Why the Belgians did not destroy it before surrendering is a question I cannot solve. But it is a fact that this factory is now working day and night turning out ammunition for the German armies in the field, east and west. In fact, Germany has by this oversight of the Belgians nearly doubled her productive capacity of ammunition.

How inadequate to the present demand even the enormous ammunition establishments of Europe are is perhaps best demonstrated by the discovery, less than a year ago, that the great Russian Putiloff factory was unable to keep pace with the increased demands made upon it by the Russian authorities, and that its enlargement was decided upon. This was the occasion when the negotiations for the admittance of German capital and German manufacturers in the concern gave rise to a lively protest from France, which feared that its secret processes would thus become the property of the Krupps, and through them of the German General Staff.

MODERN ARMIES AND THEIR ARTILLERY SUPPORT.

It is certain, then, that the stores of ammunition of the different nations at war will be exhausted before many months have elapsed, and that thereafter it will become a question of daily manufacture to supply daily needs—and at a rapidly decreasing ratio.

What are the needs of ordnance ammunition of these huge armies in the field? To answer this question with accuracy would require knowledge beyond what I possess, but a few reliable figures may help us in getting some idea of the magnitude of the problem and in reaching the conclusion that the cessation of the war through lack of ammunition is not a fantastical idea, but well within the range of possibilities.

The number placed in the field by the warring nations is, at the lowest estimate, 4,000,000 men, infantry, cavalry and artillery. We will consider only the ammunition which is under the control of the artillery. Small arms ammunition is beyond computation. Modern military science has established the principle that for each thousand men in an army there should be three guns. For armies aggregating 4,000,000 men this would mean 12,000 pieces of ordnance of various calibres, ranging from 3 to 12 inches, from field guns to field howitzers, throwing projectiles varying from 15 to 1,000 pounds. The smaller calibre ordance pieces are semi-automatic, and must, under the manufacturers' test fire twenty shots a minute. The pieces of larger ordnance fire from three to ten projectiles in the same small fraction of time. The three-inch field guns always carry 125 rounds of ammunition with them for immediate use. This estimate of three guns to each 1,000 men—120 to each army corps—is the lowest that can be made. One of the nations in this war, I am informed, has 156 cannon with each corps.

Of course, these 12,000 guns will never be in action all together. A computation of their consumption of ammunition in such a hypothetical case would be staggering but of no practical importance. But we will look at the real possibilities and the figures they yield.

Assuming that the war lasts eighteen months, or 547 days, in view of the incessant fighting that has been going on since it started it is only conservative to assume that 200 of these 547 days will be fighting days of twenty-four hours each, and that 200 hours of fighting will fall to every piece of ordnance in this army. This would be somewhat less than 1½ per cent of the time consumed in action.

So much for the time element in our calculation. It is, I believe, conservative. Now for the percentage of gun capacity expended. As already noted, semi-automatic guns have a test capacity of 20 shots a minute, or 1,200 an hour. Will a demand be made for 2 per cent of this capacity? Will such a gun fire at least 20 shells an hour? It certainly seems a minimum at which artillerists will smile, but we will adopt it, with the following results:

Assuming that the 12,000 guns of all calibres accompanying the armies in the field fire an average of 20 shells a minute for 200 fighting hours, we get the sensational total requirement of 2,880,000,000 shells, varying from 15 to 1,000 pounds. The lowest cost a shell (that of the three-inch gun) is $6, which gives the staggering minimum figure of $17,280,000,000 for ordnance ammunition alone.

Let us make another calculation. How many shells would be required in a two hours' engagement to supply 4,000 guns—one-third of the total—firing at the rate of only 5 shells a minute? Answer: Five shells a minute for 120 minutes is 600 shells a gun. Four thousand guns times 600 shells gives a result of 2,400,000 shells for two hours' fighting. At the minimum cost of $6 a shell this means $14,400,000.

The semi-automatic three-inch cannon, using the high explosive shrapnel, is without question the piece of ordnance that will be in most continuous service during this war, although we read of 392 shells from the heavy ordnance falling upon the roof of a single one of the besieged forts of Namur.

Now as to the time and labor required to manufacture these shells, with some words regarding the plants and their machine tools, in order to prove that lack of ammunition is very likely to bring about an early close of this war. In the calculations that follow I have used as basic figures the lowest number of man hours required to make one 3-inch gun shell. It takes six hours of one skilled workingman's time to make such a shell.

IMPOSSIBILITY OF KEEPING UP THE SUPPLY.

The ordnance ammunition for these 12,000 guns, assuming that the war will last eighteen months, and that during that time all the ordnance will be in action on an average of 1½ per cent of the time, and at not less than 2 per cent of its maximum (test) capacity, would require for its manufacture 125,000 man years, the man working 8 hours a day, 300 days in the year and 40,000 machine tool years, with the machine tool running at full speed 24 hours each day.

After all, this does not look impossible. One can hire labor and buy or manufacture tools, you say? Let us look into this matter a little further.

The largest ordnance plant in Europe, and probably in the world, is that of Krupp. The firm employs nearly 80,000 men, and has in use some 12,500 machine tools. But this is its full equipment, including iron and coal mines, shipbuilding plants, foundries, furnaces, steel plants and various establishments for the manufacture of industrial products of all kinds, as well as the ordnance plant. Thus, at Essen, the firm's principal works, there are 8,500 machine tools. Only 15 shops there are for the making of gun tubes, 7 for the making of sights, 15 for gun carriages and mounts and 2 for the manufacture of war vehicles. And there are only 5 shops for the making of projectiles and 2 for the making of fuses—a total of perhaps 10,000 men and 3,000 machine tools for the manufacture of ordnance ammunition. And this comparatively small force and these comparatively few tools must provide not only ordnance for the German armies in the field, but ammunition for naval and fortification purposes as well, which, being of much heavier calibre, requires many times the number of men hours used in this estimate.

We find, therefore, that of the 40,000 machine tools required to provide in one year the ordnance ammunition needed for this war the greatest ordnance establishment of Europe possesses only 3,000. As for the needed 125,000 highly skilled laborers, they are hard to find. Again I make a conservative estimate when I say that at least 50,000 of the 80,000 Krupp employes are at the front.

There are other commercial ammunition plants in Germany, and the imperial government has factories of its own, but none of them approaches the Kruop establishment in capacity. Can any of the other nations at war do any better, or even as well? Not to my knowledge. Can the American ammunition manufacturers supply the deficit? Most certainly not. Therefore a shortage of ammunition among all the belligerents is more likely to bring this war to an end than the lack of either food or money.

Of course, statistics are alluring, and it has been said that one can prove anything with figures. I might carry these calculations still further, but in that case we should be brought face to face with still another consideration—namely, that no piece of ordnance has ever yet been made which does not become useless after 5,000 rounds of ammunition have been fired from it. And that is another argument for a brief war.

One of the Krupp shops at Essen, Germany

SOME BRAVE ACTS THAT HAVE WON THE V. C.

WHAT will not a sailor do? Sixty years ago, "Tit-Bits" recalls, the Russian fortress of Bomarsund, in the Baltic Sea, was being bombarded by an Anglo-French force. Suddenly a shell fired from the fortress fell on the deck of H. M. S. Hecla. In an instant a brave young mate seized it, and, with the fuse hissing between his hands, he flung it with a jerk overboard. That young mate—he ultimately became Rear Admiral Charles Davis Lucas, who died a few days ago—was immediately promoted lieutenant and awarded the Victoria Cross, being the first to win that much coveted decoration, although, owing to three other officers being of senior rank, he was the fourth actually to receive it from Queen Victoria.

Many a gallant deed on land and sea has since that day, June 21, 1854, been duly rewarded by the bestowal of the little Maltese cross of bronze which bears the simple inscription, "For Valour."

The Victoria Cross had its origin in the Crimean War, and was primarily intended to be conferred upon junior commissioned officers and the rank and file. Neither rank, length of service, wounds nor any circumstance whatsoever can qualify for this noble badge save a personal act of signal bravery performed in the presence of the enemy. The decoration was instituted by Queen Victoria in 1856, the Prince Consort being, it is said, its originator and the designer of the insignia of it.

Each Victoria Cross is made from bronze which once formed part of some Russian guns captured during the Crimean War, and although the medal itself is intrinsically worth only about fourpence halfpenny, a number of them have been sold at sales for £100 and over. The winning of the Victoria Cross carries an annuity of £10, which may be increased to £50, payable quarterly, to all except officers, but including those who have risen from the ranks.

Mention of the fact that the campaign which provided most V. C.'s was the Indian Mutiny reminds one that several boys have secured the medal for valor. There was Bugler Hawthorne, of the 52d Light Infantry, who gallantly tried to save Lieutenant Salkeld at the blowing in of the Cashmere Gate at Delhi on the morning of September 14, 1857, and it was at Delhi that young Bugler William Sutton, of the first battalion, 60th Rifles, on the eve of the assault of Delhi voluntarily went close up to the walls to ascertain the state of the breach. He succeeded, and by the whole regiment was elected for the V. C. Like Hawthorne, he was a mere lad.

Later, at Cawnpore, we find Drummer Thomas Flinn, of the 64th South Staffordshire Regiment, actually charging the guns of the rebels with the short sword, the only arms of his rank, with which he slew in hand-to-hand combat two stalwart gunners.

In a few rare instances the V. C. has been won by more than one member of a family. The most conspicuous case is that of the Gough family, which can boast of three V. C.'s—General Sir C. J. S. Gough, General Sir H. H. Gough and Lieutenant Colonel J. E. Gough. The first two were brothers, and the last named is a son of the second. Major General E. H. Sartorius and Colonel E. W. Sartorius provide another case of brothers winning the decoration. Another instance of a father and son winning the cross is seen in Lord Roberts and his gallant son, Lieutenant the Hon. F. H. S. Roberts, who lost his life in gaining the V. C. at the battle of Colenso.